

WHAT IS CLAIMED IS:

1. A structure for fastening a second material to a first material by a tapping screw having a male thread, the first material comprising:
a hole with a surface in which a female thread is formed as the
5 tapping screw is screwed in; and
a concave portion around the hole.
2. The structure according to claim 1, wherein a diameter of a
bottom of the concave portion is larger than an outer diameter of the
10 tapping screw.
3. The structure according to claim 1, wherein a depth of the
concave portion is $1/4$ to $1/2$ of a thickness of the first material in the
concave portion.
- 15 4. The structure according to claim 1, wherein the concave portion
is trapezoid in shape and a diameter of a bottom of the concave portion
is smaller than a diameter of a top thereof.
- 20 5. The structure according to claim 1, wherein the concave portion
is formed by half blanking.
6. The structure according to claim 1, wherein the tapping screw is
a forming type, has a lead portion and a useful thread portion, and the
25 male thread includes a single-start thread in the lead portion and

double-start threads in the useful thread portion.

7. A structure comprising:

a first material having

5 a first hole with a surface; and

a concave portion around the first hole;

a second material having a second hole; and

a tapping screw to be inserted into the second hole and screwed
in the first hole to form female thread on the surface of the first hole

10 and to fasten the second material to the first material.

8. A method for forming a first material that fastens a second
material with a tapping screw having a male thread, the method
comprising:

15 forming a hole in the first material for screwing the tapping
screw, wherein the hole has a surface in which a female thread is
formed as the tapping screw is screwed in; and

forming a concave portion in the first material around the hole.